

Name: _____

Date: _____

FOIL when $A \neq 1$ SLTN (version 121)

FOIL the expressions shown below:

1. $(5x - 6)(5x - 3)$

$$\begin{aligned} & (5)(5)x^2 + (5)(-3)x + (-6)(5)x + (-6)(-3) \\ & (25)x^2 + (-15)x + (-30)x + (18) \\ & 25x^2 - 45x + 18 \end{aligned}$$

2. $(4x - 7)(-5x - 3)$

$$\begin{aligned} & (4)(-5)x^2 + (4)(-3)x + (-7)(-5)x + (-7)(-3) \\ & (-20)x^2 + (-12)x + (35)x + (21) \\ & -20x^2 + 23x + 21 \end{aligned}$$

3. $(3x - 2)(-9x + 6)$

$$\begin{aligned} & (3)(-9)x^2 + (3)(6)x + (-2)(-9)x + (-2)(6) \\ & (-27)x^2 + (18)x + (18)x + (-12) \\ & -27x^2 + 36x - 12 \end{aligned}$$

4. $(-5x - 6)(9x - 8)$

$$\begin{aligned} & (-5)(9)x^2 + (-5)(-8)x + (-6)(9)x + (-6)(-8) \\ & (-45)x^2 + (40)x + (-54)x + (48) \\ & -45x^2 - 14x + 48 \end{aligned}$$

5. $(5x - 3)(-8x - 2)$

$$\begin{aligned} & (5)(-8)x^2 + (5)(-2)x + (-3)(-8)x + (-3)(-2) \\ & (-40)x^2 + (-10)x + (24)x + (6) \\ & -40x^2 + 14x + 6 \end{aligned}$$

FOIL the expressions shown below:

6. $(-8x - 8)(-2x - 4)$

$$\begin{aligned} &(-8)(-2)x^2 + (-8)(-4)x + (-8)(-2)x + (-8)(-4) \\ &(16)x^2 + (32)x + (16)x + (32) \\ &16x^2 + 48x + 32 \end{aligned}$$

7. $(-6x - 5)(6x - 5)$

$$\begin{aligned} &(-6)(6)x^2 + (-6)(-5)x + (-5)(6)x + (-5)(-5) \\ &(-36)x^2 + (30)x + (-30)x + (25) \\ &-36x^2 + 25 \end{aligned}$$

8. $(6x + 4)(9x - 3)$

$$\begin{aligned} &(6)(9)x^2 + (6)(-3)x + (4)(9)x + (4)(-3) \\ &(54)x^2 + (-18)x + (36)x + (-12) \\ &54x^2 + 18x - 12 \end{aligned}$$

9. $(4x - 8)(6x + 9)$

$$\begin{aligned} &(4)(6)x^2 + (4)(9)x + (-8)(6)x + (-8)(9) \\ &(24)x^2 + (36)x + (-48)x + (-72) \\ &24x^2 - 12x - 72 \end{aligned}$$

10. $(-8x + 3)(-9x - 6)$

$$\begin{aligned} &(-8)(-9)x^2 + (-8)(-6)x + (3)(-9)x + (3)(-6) \\ &(72)x^2 + (48)x + (-27)x + (-18) \\ &72x^2 + 21x - 18 \end{aligned}$$